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Amendments to the Specification

- [23] As shown in Figure 2, valve 46 is pivotally mounted to carrier 26 to permit its movement along the direction of arrow R. As shown, valve 46 comprises a flap sized to partially cover but not fully cover carrier air opening 28 when completely closed. It is important that valve 46 not completely close so that some air may continue to support ignition within engine cylinder 38. In one example, Preferably, seventy to eighty percent of carrier air opening 28 remains open when valve 46 is fully closed.
- [24] Figure 3 illustrates a bottom view of carrier 26. As shown, valves 46 are mounted to carrier 26 at bearing surface 66 through shaft 50. Bearing surface 66 may be a ball bearing, needle bearing, sliding bearing or other commercially available bearing. Shaft 50 is disposed in channel 51 to limit communication of air between openings 28. Lands 53 are raised above channel 51 to seal one opening 28 from another opening 28. Shaft 50 may be plastic or metal. To prevent damage to carrier 26 by shaft 50, metal sleeves 74 provide another bearing surface upon which shaft 50 may turn. In addition, sleeves 74 serve as a seal between openings 28. In one example, sSleeves 74 are preferably metal and need not be mounted to carrier 26.
- [25] As shown in Figure 4, at the end of carrier 26 that supports actuator 78, shaft 50 may be supported by a ball bearing 70. Shaft 50 extends through ball bearing 70 for connecting to actuator 78. In this example, addition, it is preferable that the bearing seal 98 is be employed to prevent the leakage of air from manifold 14 out of this end of carrier 26.